

8x16mm LED Neon Flex

Natural White 4000K | Horizontal / Side Bend | 48V DC | IP67

BEND	BODY	CUT INTERVAL	MAXIMUM RUN	SUPPLY
Horizontal	8x16mm	100mm	40 Metre	48V DC

SPECIFICATIONS

Property	Specification
Colour	Natural White 4000K
Supply voltage	48V DC
Body cross-section	8x16mm
Cut interval	100mm (10cm)
Maximum continuous run	40 Metre
Bend direction	Horizontal / Side Bend
Min. bending radius	1.5cm
Beam angle	120°
Body construction	Solid silicone extrusion
Housing colour	White
Body protection	IP67
Rated power	9.4W/m
LEDs per metre	120
Lumens per metre	375 lm/m
CRI Ra	>90
LED package type	SMD2835
Average lifetime	50,000 hours
Operating temperature	-30°C to 50°C
Warranty	4 Years
Order length	Custom cut / made to order

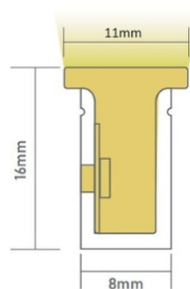


Solid silicone construction

A continuous, diffused line of light in a compact 8x16mm body. The solid silicone extrusion supports smooth horizontal curves for architectural and outdoor lighting.

Construction illustration; light colour is indicative.

COMPACT DIMENSIONS



FLAT SURFACE:120°

8mm body width
16mm body height
11mm emitting face

Flat light-emitting face
120° beam angle
Horizontal bend only

Made to measure and custom cut to your specific requirements, within the permitted cut marks and maximum run.

Continuous runs up to 40 metre with one-side power. Cut only at the 100mm marked positions.

Performance & selection

Natural White 4000K | 48V DC | 100mm cut interval | 40 metre maximum run

LIGHT OUTPUT & COLOUR

375 lm/m

Lumens per metre

120

LEDs per metre

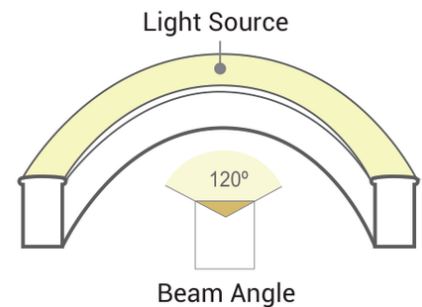
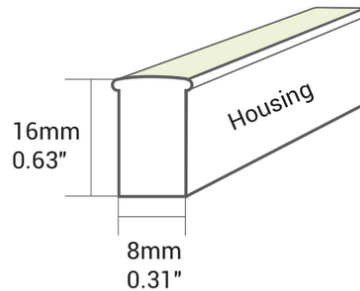
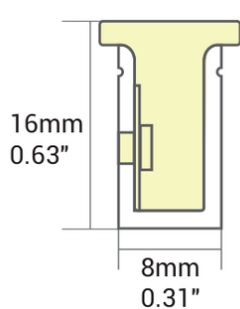
>90

CRI Ra

9.4W/m

Rated power

BODY DIMENSIONS, HOUSING & BEAM

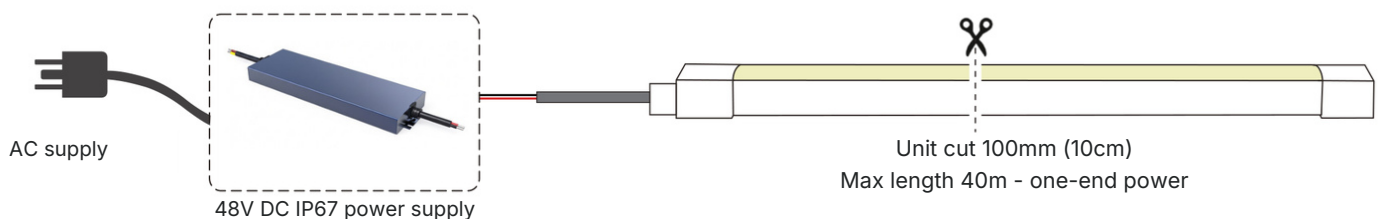


8mm body width · 16mm body height · 11mm emitting face · 120° beam. Fitting dimensions are separate.

WEBSITE SKUS

NF48-0816-40K

ELECTRICAL SELECTION & ONE-END CONNECTION



Nominal current: 195.8mA/m, calculated from rated power / supply voltage. Load for the full 40 metre run: 376W before power-supply allowance. Match the supply voltage and allow headroom according to the driver specification. Check polarity, cable voltage drop and driver capacity. Do not join independent power-supply outputs together.

WARNING: Use only 48V DC, matching the light. Never connect directly to 220-240V AC mains; incorrect voltage can damage the light.

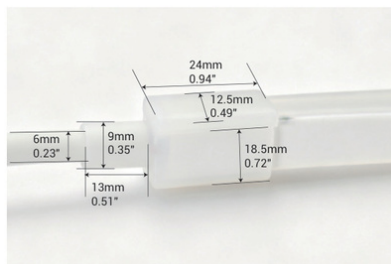
Incorrect-power damage: Damage caused by incorrect voltage or direct mains connection is not covered by warranty where ATOM LED is not at fault. ATOM LED Lighting Ltd accepts no liability for loss or damage caused by such connection where it is not at fault. This does not exclude liability for our negligence or breach of statutory duty, or affect your statutory rights.



Connection accessories

IP67 connector options | Dimensioned fitting examples and silicone construction

Choose the cable exit for your custom-cut length. Dimensions below are separate drawing callouts in millimetres; they do not form one nominal connector size.



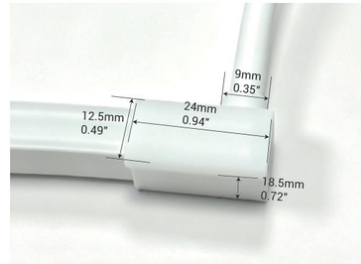
Front cable exit

24 / 12.5 / 18.5 / 9 / 6 / 13mm



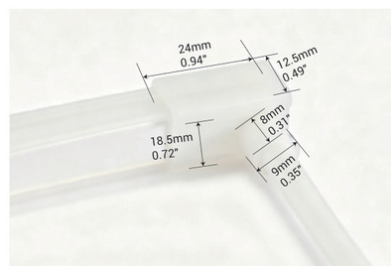
Bottom cable exit

24 / 12.5 / 18.5 / 8 / 9mm



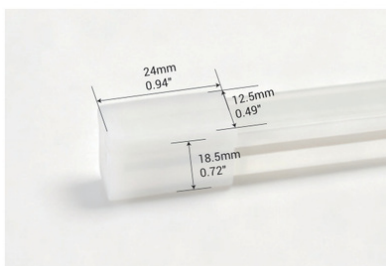
Left cable exit

24 / 12.5 / 18.5 / 9mm



Right cable exit

24 / 12.5 / 18.5 / 8 / 9mm



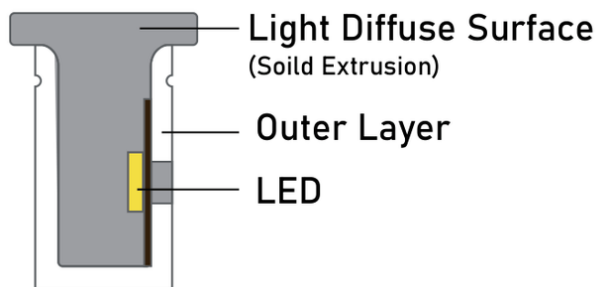
Closed end cap

24 / 12.5 / 18.5mm

Connection notes

Fitting body: 24mm long, 12.5mm wide and 18.5mm high. Neck callouts are separate. Match every fitting and sealing kit to the actual neon. Use two conductors: positive (+) and negative (-).

SILICONE CROSS-SECTION



Solid silicone extrusion surrounds the LED. The source cross-section identifies the light-diffusing surface, outer layer and LED.

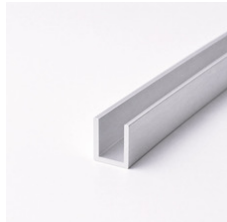
Example lead: 200mm, with a separate 6mm callout. This does not specify conductor gauge, capacity or the included lead length.

Seal every joint correctly. An IP68 connection requires a verified IP68 connector system, assembled and sealed to its specified instructions. The neon body remains IP67.

Profiles & mounting guidance

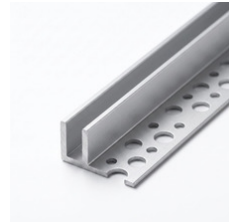
8x16mm profile options from ATOM LED | Product images and SKUs link to the website.

MATCHING PROFILES - ORDER SEPARATELY



Straight aluminium

NFPROFILE-816
1 metre channel



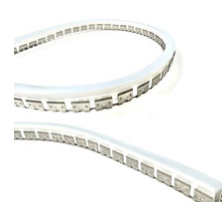
Tile-in aluminium

NFPROFILE-T0816-1M
NFPROFILE-T0816-2M



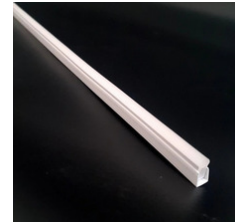
Bendable tile-in

NFPROFILE-BT0816-1M
NFPROFILE-BT0816-2M



Bendable aluminium

NFPROFILE-B0816
1 metre channel

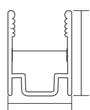


PVC channel

ALNFPROFILE816
1 metre channel

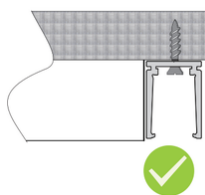
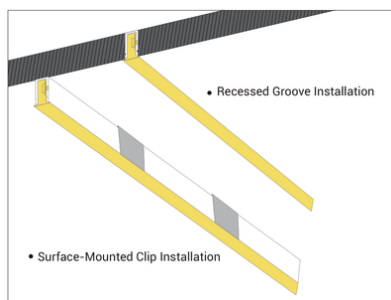
Tile-in SKUs ending -1M and -2M identify 1 metre and 2 metre lengths. Match the channel to the neon and planned bend. IP67 applies to the sealed neon, not the bare profile.

ILLUSTRATED CHANNEL DIMENSIONS

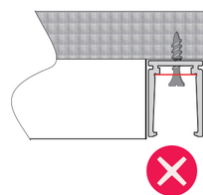


Supplier channel example: 10.5mm outside width / 9mm clear opening / 14mm height. These are accessory dimensions, not the neon body or every website profile. Check the chosen product drawing and fit. Example screw callouts: 6mm and 25mm; select fixings for the substrate.

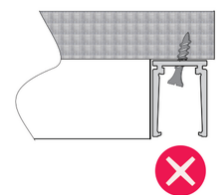
INSTALLATION METHODS & FIXING POSITIONS



Flush / recessed



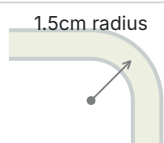
Proud head: wrong



Angled screw: wrong

Secure and deburr the channel; remove swarf. Keep screws straight, flush or recessed. Insert the neon progressively by hand, with connectors clear of the channel.

BENDING & ESSENTIAL CAUTIONS



1.5cm minimum bending radius. Horizontal bend only. Keep the first and last full 100mm cut units straight. Do not twist, kink, crush or pull. Isolate power before work; use 48V DC, correct polarity, sealed joints and marked 100mm cuts. Operate within -30°C to 50°C.

Fully unroll before power. Never operate in the packaging coil; the manufacturer warns against exceeding 30 minutes energised in a coil.

Full illustrated mounting sequence, cautions and troubleshooting: [Install48-0816-C100.pdf](#)